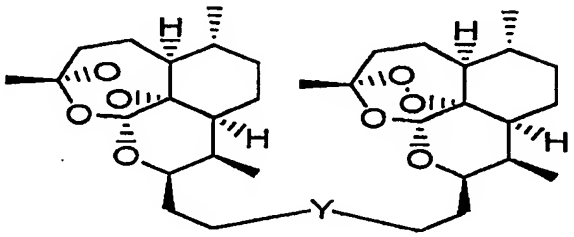
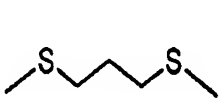
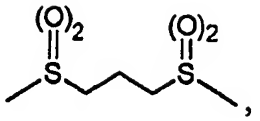
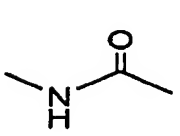
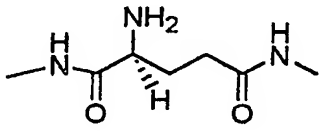
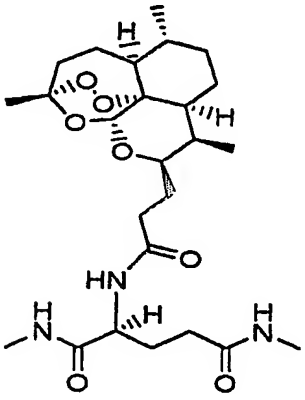
Claims

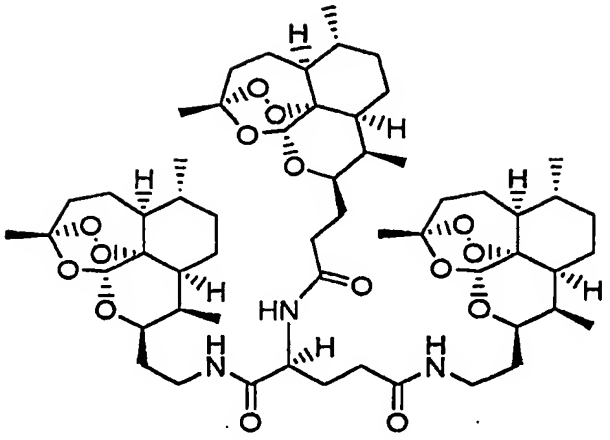
1. A deoxoartemisinin analog of the following formula:



wherein Y is -S-, -SO_2-,  ,  ,  ,  , or

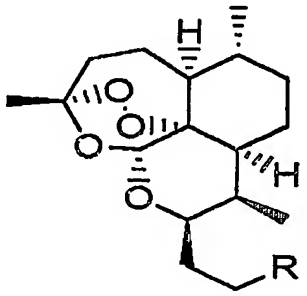


2. A method for preparing deoxoartemisinin trimer of the following formula, said method comprising the steps of: (a) coupling 12-carboxylethyldeoxoartemisinin with L-glutamic diethylester; (b) hydrolyzing two ester groups of the product from said step (a); and (c) doubly coupling the product from said step (b) with 2 moles of 12-aminoethyldeoxoartemisinin:



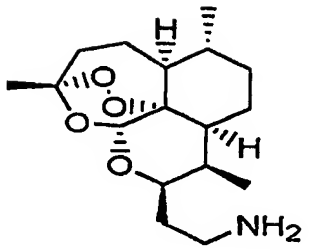
3. The method as claimed in claim 2, wherein said coupling reaction is carried in the presence of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide and 10-hydroxybenzotriazole (EDC/HOBt).

4. A deoxoartemisinin analog of the following formula:



wherein R is Br or NH_2.

5. A method for preparing 12-aminoethyldeoxoartemisinin of the following formula, said method comprising the steps of: (a) hydroborative oxidizing a terminal olefin of 12-vinyldihydroartemisinyl alcohol; (b) brominating the product from said step (a) with CBr_4/PPh_3; (c) photooxygenative cyclizing the product from said step (b); (d) reacting the product from said step (c) with sodium azide; and (e) reducing an azide group of the product from said step (d):



6. An anticancer agent comprising said deoxoartemisinin analog as claimed in claim 1.